

In the claims:

1. (Currently Amended) An electrocardiograph system comprising:

an acquisition element adapted to be disposed on a chest of a patient and to be coupled to a the patient through a set of relatively short leadwires; and
a hand-held, battery powered portable processing element that is physically separate from the acquisition unit, that is coupled to the acquisition element through a connector cable and that is controlled through a graphical user interface.

2. (Original) The electrocardiograph system as in claim 1 wherein the processing element further comprises a display.

3. (Original) The electrocardiograph system as in claim 2 wherein the display further comprises a liquid crystal display.

4. (Original) The electrocardiograph system as in claim 3 wherein the liquid crystal display further comprises a color or monochrome graphical display with sufficient resolution to display waveforms.

5. (Original) The electrocardiograph system as in claim 2 wherein the display further comprises a touch screen interface.

6. (Original) The electrocardiograph system as in claim 1 wherein the processing element further comprises a compact flash card or similar memory expansion slot.

7. (Original) The electrocardiograph system as in claim 6 wherein the compact flash expansion slot further comprises a compact flash read only memory disposed in the compact flash card expansion slot.
8. (Original) The electrocardiograph system as in claim 1 wherein the processing element further comprises an infrared transceiver for communications.
9. (Original) The electrocardiograph system as in claim 1 wherein the processing element further comprises a radio frequency transceiver for communications.
10. (Original) The electrocardiograph system as in claim 1 wherein the processing element further comprises an audio recording unit.
11. (Original) The electrocardiograph system as in claim 1 wherein the acquisition element further comprises a plurality of signal conditioning circuits.
12. (Currently Amended) The electrocardiograph system as in claim 1 wherein the acquisition element further comprises a baseline sway filter.
13. (Currently Amended) The electrocardiograph system as in claim 1 wherein the acquisition unit element further comprises a pacemaker pulse detector adapted to detect pacemaker signals.
14. (Currently Amended) The electrocardiograph system as

in claim 1 wherein the acquisition element further comprises analysis and interpretation.